

Running head: IMPROVING CONSULT MANAGEMENT AT DGMC

Improving the Consult Management Process

at David Grant Medical Center

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Abstract

David Grant Medical Center perceives there is a problem with the management of consults within the medical facility. This project addresses the issue of how to best redesign the consult process to improve access and customer satisfaction. By defining an ideal consult system, problems and inefficiencies within the David Grant Medical Center process will be highlighted. Four major areas are noted for improvement: institution of UM to profile providers, changes in the structure and responsibilities of the consult management office, upgrading the dictation and transcription services and mandating electronic consults.

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Introduction

The Department of Defense (DoD), through the Military Health System (MHS), is directly responsible for maintaining the health of 1.6 million active duty service personnel. As an employer, the DoD also offers health care to 6.6 million other military-related beneficiaries, including dependents of active duty personnel and military retirees and their dependents (Backhus & Shields, 1995). Most care is provided through a worldwide system of medical centers, hospitals, and clinics, and through a DoD-administered program called TRICARE.

The DoD had tested several approaches to delivering health care incorporating managed health care principles. The end result of these tests, TRICARE, offered beneficiaries some flexibility over the old Civilian health and Medical Program (CHAMPUS). TRICARE is a fixed-price, at-risk, triple-option health benefit program, offering a health maintenance organization (HMO) choice - TRICARE Prime, a preferred provider choice (PPO) - TRICARE Extra, and the existing standard CHAMPUS choice - TRICARE Standard (Barrett, 1997). Some of the managed care features introduced included enrollment, utilization management, and assistance in referral

to the most cost-effective providers (Backhus & Shields, 1995).

Several significant problems have consistently plagued the MHS in its efforts to provide peacetime care (Backhus & Shields, 1995). While many of these problems parallel those that the civilian healthcare system is facing, others are unique to the military (Backhus & Shields). The key issues relevant to this project include healthcare delivery transitioning from a specialist focus towards a primary care focus, incorporating utilization management in daily operations, capitated budgets and patient satisfaction.

Conditions Which Prompted the Study

David Grant Medical Center (DGMC) is one of five medical centers operated by the Air Force. DGMC is a 303 bed tertiary care and the regional referral facility for the DoD Health Services Region 10 in Northern California. It offers most major medical, surgical, and dental specialties with the exceptions of open cardiac surgery and organ transplantation. DGMC has a large Graduate Medical Education (GME) program with residency programs in eight medical specialties including surgery, family practice, pediatrics, obstetrics/gynecology and internal medicine.

Annually, DGMC provides nearly 400,000 outpatient visits, 6,000 operative procedures, and 8,000 admissions with an annual operating budget of \$56 million (S. Childress, personal communication, October 29, 1997). DGMC hosts the DoD's Region 10 Lead Agent for the TRICARE regional health care delivery system, consisting of 4 Air Force, 3 Coast Guard, 2 Navy and 1 Army medical treatment facilities serving a population of over 335,000 beneficiaries (G. Swanson, personal communication, 30 October 1997).

In the past, DGMC flourished as a referral facility for the many small DoD hospitals throughout the Northwest, West Coast, and Pacific regions. Recently, however, following the downsizing of the military there has been a significant reduction in active duty personnel making up this referral base. DGMC is seeking to improve its position as a regional referral facility in order to maintain its GME programs and status as a medical center.

In order to accomplish this, the staff at DGMC wants to improve the mechanism for processing physician consults and referrals for specialty care. The Office of the Lead Agent (OLA) is responsible for managing the referral patterns within the region (Joseph, 1996). Personnel at the OLA see the consult management program at DGMC as a broken process. The

issue of inadequate consult management procedures was also addressed at the Region 10 Board of Governors meeting in August 1997. Several MTF commanders within the region voiced concern about the consult system. There exists a perception that consults sent to DGMC are lost in a "black hole".

Primary care physicians in the outlying regional facilities report poor service and lengthy response times from DGMC. Their major complaints are inability to get patients seen at DGMC in a "timely manner" and lack of feedback regarding the status of the consult, i.e., will the patient be seen, what were the findings, etc. (C. Cooper, personal communication, 15 December 1997).

There is also a requirement for a new step in the consult process. Following the lead of private-sector managed care programs, DoD Health Affairs requires each region and medical treatment facility (MTF) to implement a comprehensive utilization management (UM) program (Joseph, 1994).

Utilization management programs are designed to ensure appropriate use of medical resources, to support quality care, and to ensure that beneficiaries receive appropriate and coordinated health care services (Payne, 1987). The primary components of UM include pre-certification, concurrent and retrospective review, case management, and discharge planning

(Shortell & Hull, 1996). Through UM, health care administrators evaluate the use of medical resources on an ongoing basis. DoD officials view UM as a key to containing costs and ensuring health care quality and access (Backhus & Shields, 1995). Currently there is no UM for referrals to or within DGMC.

There exists a strong financial incentive, not only for DGMC but also for the Region and the MHS as a whole, to keep care within the MHS system. TRICARE, like other managed care programs, uses a capitation method to allocate health care funds. Capitation is a strategy for containing the cost of health care by allocating resources based on a fixed amount per beneficiary in the population (Kongstvedt, 1996). The concept of capitation is recognized nationally as an important strategy for containing the cost of health care (Joseph, 1996). Capitated models are considered the strongest form of managed care because they give providers the greatest incentive to control utilization (Scanlon, 1995).

Under the new enrollment based capitation program, DGMC will be reimbursed for care provided to beneficiaries enrolled to other MTFs or regions (policy guidelines for transfer payments, 1997). As the regional referral facility, DGMC stands to benefit a great deal from these transfer payments,

provided it can optimize the system for getting referrals into the facility.

Statement of the Problem

The problem being addressed in this study is how to best redesign the consult or referral process to improve access and customer satisfaction. In other words, how can DGMC improve its consult system to optimize quality of care, access to the specialists, and control costs within the network by changing its management philosophies and referral practices.

Literature Review

In the strict definitional sense, there is a difference between consults and referrals. According to Saunders (1978), consultation implies the primary care manager keeps responsibility for managing the patient while a referral denotes a transfer of responsibility to another physician. For this project the terms are used interchangeably to denote a request from a PCM to a specialist to see a patient and report back the findings to the PCM.

Variation

Even in the early seventeenth century patients would request advice from the leading physicians of the day regarding their condition (Brockliss, 1994). More often than not, these consultations were conducted via letter rather than

physically seeing the patient (Brockliss). Not until the early modern era, with the development of more sophisticated medical and diagnostic tools did the requirement for the specialist to see the patient come about.

According to Rakel (1995), the primary care physician accomplishes 95 percent of all patient care. For those patients referred, the reason for referral varies from fear of litigation to patients' demands. Several studies (Reynolds, Chitnis, & Roland, 1991; Grol, Whitfield, De Maeseneer, & Mokkink, 1990; Armstrong, Fry, & Armstrong, 1991) show the referral behavior of doctors is driven primarily by their clinical skills, willingness to take risks, and pressure from patients. Additional research (McMahon & Newbold, 1986; Goldfarb, Hornbrook, & Higgins, 1983) indicates that it is physician specific characteristics that account for variation in referral rates and each PCM will have a different approach to initiating a referral based upon their experience level.

Utilization Management

Inappropriate use of medical services can be costly and raise quality of care concerns. The notion that the variation in referral practices indicates inappropriate use and excessive costs is widely held (Fertig, Roland, King, & Moore, 1993; O'Brien, McComb, Fox, Bearn & Wright, 1996). For

example, a 1988 study found that 14 percent of bypass surgeries were performed inappropriately (Jaggar, 1996). Fertig et al., evaluating the rate of inappropriate referrals, found the specialist rated 10 percent of PCM referrals inappropriate and nearly 16 percent were possibly inappropriate.

A study by Inglehart (1992) found it difficult to change physicians' practice behavior. To the contrary, Chao, Galazka, Stange, & Fedirko (1993) did find some degree of success through use of a prospective review system.

In an effort to control the overutilization of specialty resources, Health Affairs mandated a universal utilization management program. In developing their UM plans, lead agents are required to review the capabilities and capacity for each MTF within their region to perform the required UM functions for the direct care system (Backhus & Shields, 1995). Lead agents have two options available to them. They may contract for utilization management services or the military medical facility may retain those functions (Backhus & Shields).

Financial

Financial viability is rapidly emerging as a significant driver of health care operations. Civilian managed care plans attempt to reduce costs by employing several strategies, one

of which is directing patients to a limited number of less costly or more efficient hospitals (Hill, 1994). The federal sector is making attempts to mirror this strategy. Decisions about referrals are increasingly dependent on costs. Leaders in the MHS believe that care provided to its patients at military facilities is less expensive than care at civilian facilities (Backhus, 1997). For this reason, MTFs are under pressure to open up their space for referrals to keep patients in the federal system and not pay the premium prices in the civilian networks.

In the past, hospital commanders had no incentive to control CHAMPUS usage because this budget was not under their control, nor were they held accountable for its use. Therefore, complicated or costly procedures could be referred to civilian care without affecting military hospital costs (Backhus & Shields, 1995). Under the capitated environment this is not a viable option for an MTF, as such referrals will cost them operating dollars.

Satisfaction

Recent research links increased financial return directly to patient satisfaction (Nelson, 1992). Enrollment based capitation means the MTF is funded based on the number of people enrolled with the facility. If patients don't get what

they want they will go elsewhere. The same is true for PCMs. Many PCMs see referrals as a source of aggravation rather than assistance with patient care (Schatz, Venable, Weiss, 1996). If they are not getting the support they want from a specific specialist, they will find other providers.

Taylor and Lessin (1996) found that for health care plans to be successful, they must differentiate themselves and exceed the expectations of their customers. They go on to say "health plans must focus on good delivery systems, customer satisfaction, and effective administration" (Taylor & Lessin, 1996, p.37). The MTF must come to an understanding of the important aspects of care from the patient's perspective (Young, Minnick, & Marcantonio, 1996).

Health care is rated as one of the top five quality of life elements (Command Poll, 1995). Many senior DoD officials feel that quality medical care for their personnel and families is a key aspect to maintaining high morale. (It's People, 1994). DGMC must look at what makes its beneficiaries most unhappy and fix those problems. Access to care was rated fair or poor by 55% of respondents in a recent MHS survey (Chisick, 1997). For the DGMC, this is a red flag for the need to improve access and ease the burden on the patient.

Where possible, DGMC needs to remove the barriers standing in the patient's path to obtaining the appropriate level of care. Specifically, beneficiaries using civilian facilities report having less trouble scheduling appointments, shorter intervals between making the appointment and the actual visit, and less time spent in the waiting room (Backhus & Shields). According to the DoD survey, difficulty or inability to get an appointment was one of the most frequently cited reasons for not seeking care in military facilities (Backhus & Shields).

Purpose

The purpose for this graduate management project is to develop a model for the consult management process at DGMC. This model should incorporate utilization review, meet the expectations of the physician staff, both specialist and PCM, and improve patient satisfaction. Substantial changes to the current process will be explored. The results of this study will provide the executive management team a tool to assist in redesigning the referral process.

Methods and Procedures

The methodology for this project included: (a) an analysis of the current referral process at DGMC, (b) a literature review, (c) interviews with other military medical centers regarding their referral management process, and (d)

work with a team of functional area experts to develop a workable process for DGMC. The medical center tasked quality improvement teams to address both consult management and patient appointment procedures. This researcher joined these existing teams to gain an understanding of the current systems, contribute information gathered during the literature review, and provide an "outsider's" view of the process. Elements or procedures in place in other medical centers that streamline the process and thereby improve access and satisfaction were identified as desirable. Obstacles, real or perceptual, hindering patient flow through the system were identified as undesirable. Based on the literature review, interviews with other military treatment facilities, and discussions with DGMC staff, a model for the "ideal" process is presented. This process is compared to the current process, gaps that exist between the ideal and current processes are identified, and recommendations to close those gaps are proposed.

Findings

To develop the key issues, I met weekly with a group of physician specialists, PCMs, administrators, and nursing staff to develop an ideal process for consults within DGMC. Information gathered in these meetings was further clarified

with informal interviews with individuals as required. Recommendations addressing key issues will be addressed later in this paper.

Development of Ideal Process

An ideal process is defined as that which meets and is responsive to the needs of the customer and specialist. In this process the customer is the patient and/or the referring provider. The specialist is the physician being consulted. Based on this definition of the ideal process, four main components are specified.

The first component, meeting the needs of the patient, is defined as providing appointments as easily and quickly as possible given the parameters of the system. As identified in my literature review, important aspects of patient satisfaction include ease of making appointments and time frame for appointment availability (Jatulis, Bunde, & Legorreta, 1997; Bowers, Swain, Koehler, 1994; Taylor & Lessin, 1996). An ideal system should ensure the patient is given the appointment as quickly as possible.

Another component, meeting the needs of the referring physician, is defined as ensuring feedback is provided throughout the consult process. By definition, the PCMs are responsible for coordinating all of the care for the patient.

Therefore, it is only natural they are advised at every step in the referral process as to the status of their patient. This is especially true following the specialty appointment if the patient is returning to the PCM for follow-up.

Provider efficiency is the third component. This entails the needs of the specialist, identified as ensuring all required elements are completed before they see the patient. This process ensures maximum efficiency of their limited resources. Ensuring PCMs are performing to the desired standard is also necessary. Specialists then only spend their time with cases truly needing their attention.

The last component identified for an ideal system is standardization for handling referrals. Incorporated in this concept is the need for all consults to be generated electronically. This allows for better tracking and analysis of consult data in order to identify trends and problems. Additionally, electronic consults facilitate the feedback of information to the PCM.

These components: patient access, feedback, provider efficiency, and standardization were identified based on input from PCM and specialists, analysis of patient and provider complaints, and research into determinants of patient satisfaction. The goal was to develop a system responsive to

the customers' needs, allowed patients to schedule appointments easily, ensured adequate preparation prior to the specialist seeing the patient, and provided feedback to the referring provider.

The requirement to institute an UM step in the process can be viewed as being at odds with an ideal system. Ideally, PCMs would handle everything within their responsibility, and therefore any consults generated would be appropriate. Also, UM places an additional barrier in the path of a consult, potentially increasing the time required for consult approval and eliminating the possibility for a patient to immediately make an appointment. In order to accomplish this requirement while maintaining minimal inconvenience to the patient, review should be concurrent as opposed to prospective. This enables the consult to move through the system much more rapidly and opens the door for scheduling of the referral appointment before the patient leaves the hospital. Under this arrangement, UM is used as a method to flag providers who are not practicing up to their skill set and/or inappropriately referring patients. Areas to target for additional PCM training are identified. This arrangement puts the burden for improving the system on the PCMs with minimal impact on the patients. Given these components, a flow for the ideal

consult process was developed. The steps defined for the ideal process are as follows.

STEP 1. The PCM determines the patient needs care he/she cannot provide. The assumption under ideal circumstances is that the physician has accomplished all tasks and treatments within their PCM skill set as identified in the InterQual or Milliman and Robertson criteria. These criteria are proprietary sources defining treatments to be accomplished by the PCM prior to referral to a specialist. Since this is the ideal model, a review by the UM department is unnecessary and non-value added.

STEP 2. The consult is generated electronically in the Composite Health Care System (CHCS). Once entered, the consult is electronically sent the specialty clinic.

STEP 3. The consult is received at the specialty clinic. The clinic staff has the ability to review the consult to ensure they have the capability to perform the required treatment and sufficient appointments available. This review allows the specialist to ensure any required tests are ordered prior to them seeing the patient. This review is done immediately by a designated person within the clinic.

STEP 4. The patient is directed to the specialty clinic receiving the referral. The patient has the option to

schedule an appointment immediately before leaving the hospital. This eliminates frustrations on the part of the patient with calling for appointments and frustrations on the part of the staff with trying to call patients to schedule appointments. If the patient does not wish to schedule the appointment at that time, address and phone information are verified and the patient is advised to call for their appointment.

STEP 5. If no appointments are available within the 30-day specified time frame, the patient is forwarded to the TRICARE Service Center to schedule an appointment with a network provider.

STEP 6. If the patient is scheduled for an appointment or disengaged, a note is entered in the electronic consult back to the PCM to advise them of the status.

STEP 7. Following the patient's appointment, the provider dictates the findings, which are then transcribed into the patient's record with a copy forwarded to the PCM. Ideally, this copy to the PCM will be electronic, attached to the original consult to close the loop with the PCM. If the consult is thought to be "inappropriate" and the specialist feels the patient can be followed by the PCM, the specialist would convey this information to the PCM.

This process is represented graphically in the flow chart in Figure 1.

Key issues identified

Recommendations derived from the key issues will be addressed in the following section.

PCM Skill Set

The first and most basic issue identified was the PCM skill set. At the root of the process is ensuring every PCM is aware of their role and responsibilities and ensuring each possesses the necessary skills to feel comfortable treating everything they should be treating. From the conversations with PCMs, this is not the case today. The history and mindset of military physicians, especially those here at DGMC has been to consult any "specialty" case. For example if patients have a sprain they are sent to orthopedics, patients with migraines are immediately referred to a neurologist. This can be attributed in part to the lack of controls within the military system and the in-house proximity of the specialists. This is congruent with what Roland and Morris (1988) found regarding availability of consultants and its impact on volume of consults. If PCMs are referring for care that should be provided within their skill set, this needs to be identified. A mechanism should be established to provide

any necessary training to bring PCM skills up to an established and agreed upon level. The issue of how much inappropriate referrals is a problem cannot currently be answered. The commanders of several specialty clinics felt they received consults for problems that could be handled at the PCM level; however, there is currently no tracking mechanism to quantify the extent of this problem.

Feedback to Referring Provider

There is not a standardized mechanism to ensure feedback to the PCM takes place. Notifications that a patient is either awaiting an appointment or has an appointment and post appointment notes are sometimes lost in the system. After intense analysis of the process there are several issues causing this problem, one of which is a lack of standardization. Most consults are accomplished electronically, but there are several physicians within the facility refusing to use electronic order entry options and generating hand-written consult forms. Several outlying facilities, such as Beale AFB and Mather AFB, are directly connected to DGM's CHCS system. Consults ordered by these facilities are directly entered into the electronic system as if they were generated in-house. All other facilities and any consults from network providers are written by the requesting

provider and faxed to a central location within DGMC called the Consult Management Office (CMO). Upon evaluating the operation of the CMO, their name is a misnomer, they do not "manage" the consult process, instead they input the information from the handwritten consult into CHCS and forward both the electronic and written consult request to the appropriate clinic.

Physicians who enter consults directly into CHCS (i.e., those within DGMC and the others as noted) do receive an electronic notification when the consult is appointed. However, these physicians do not receive adequate information when consults are disengaged from DGMC providers and sent into the network for a civilian appointment. The PCMs I spoke with simply stated they would like a reason for disengagement when one occurs. For consults entered by CMO, the electronic notification is returned back to the CMO clerk. CMO must print out these notifications and fax them to the referring physician. While the CMO staff attempts to do this with the completed consult notes, notification on the status of an appointment does not usually make it back to the referring physician.

An issue highlighting the importance of this feedback mechanism came to light during this project. The TRICARE

contractor notified DGMC they will begin enforcing a contract element requiring notification of acceptance or rejection of the consult within 24 hours of submission to DGMC. Also, the contractor will pull back any consults at DGMC that have not been appointed within 21 days, allowing them 7 days to schedule the appointment in the network, in order to meet DoD appointment standards.

One major barrier in the post appointment feedback loop, according to the specialists, is the lack of a dictation/transcription service. Most physicians do not have the time or the typing skills necessary to enter their follow-up notes into CHCS for return to the PCM. Handwritten notes are added to the patient's chart or given to the patient for return to their PCM. There is no assurance the information is clearly transmitted to the PCM. A DoD policy letter was recently issued requiring a legible and written report of findings be returned to the referring physician within 72 hours of the patient's visit.

UM Review

Higher authority has mandated UM review of consults. Therefore another major finding is the requirement for implementing a UM program. Since the world is not ideal and the past history of PCMs has been to consult for more patients

than may be necessary, UM is a must. Currently there is no UM review for outpatient consults within DGMC. Recently the UM department assigned one nurse to take on this role. It is currently difficult to predict the number of "inappropriate" referrals since no clinic within the facility currently tracks this information. As addressed earlier, conversations with clinic chiefs yielded a feeling that anywhere from 5-15 percent of their consults being received are inappropriate. Establishing UM review of consults is clearly indicated. With only one person assigned to accomplish this task, however, every consult cannot be reviewed. There are approximately 150 consults per day generated from within DGMC. If additional resources cannot be allocated to reviewing consults, a method must be developed to identify and target specific problem areas first.

Lack of UM leads into another major issue: trending and provider profiling to follow-up for training items. This issue ties into the first. Many PCM physicians are not aware of their responsibilities as PCMs. Many do not feel comfortable with some of the procedures, such as PAPs, they are expected to accomplish. Without monitoring of consult appropriateness, specific areas to target for PCM training cannot be identified.

Consult Management

The fourth major issue addresses patient satisfaction head on. Currently there is no single point of contact regarding consults. As I mentioned, CMO merely puts outside consults into CHCS. Each clinic handles consults in a completely different way. Some clinics, such as general surgery, book any and all consults received while others require one of the specialists to review the consult prior to an appointment being given. Some clinics book their own consult appointments while others depend on an already overworked central appointment office to contact their patients to schedule appointment. When attempting to contact patients it is sometimes hard to reach them. Several clinics have volumes of paperwork documenting attempts at contacting patients to schedule appointments. Generally, it is the medical technicians within the clinics making these attempts. Such tasks take them away from their primary duties of supporting the physician with patient care. For clinics using central appointments, the appointments clerks run into the same issues while attempting to contact patients. Moreover, the clerks working on consults take away resources, exacerbating the problems patients encounter attempting to get through to central appointments. Put simply, by trying to

schedule consults; there is one less clerk and one less phone line available for patients who are calling in. Patients who have questions about the status of their consult have no central place to call and are told to contact the clinic. Once contact is made with the clinic, the patient may or may not get their question answered.

Another issue within consult management is specialist review prior to accepting the consult. Several specialists are adamant that they must review the consult prior to an appointment being booked while others require no review. Under the ideal scenario, someone is available all the time for this review. Reality, however, is the physician reviewing consults may be unavailable for long periods of time. The problem this creates is a delay in the consult being accepted while awaiting review by the physician. Some physicians interviewed admitted consults waited up to a week for review. This delay may be behind the TRICARE contractor initiating a requirement of acceptance/rejection feedback on their consults within 24 hours.

Recommendations

PCM Skill Set

The first step in improving the consult process needs to be education of the internal DGMC PCMs to maximize their

performance. If DGMC physicians are practicing to the desired skill sets, their referrals should decrease, opening up appointments for those outside providers. Currently there is no-one collecting data on the practice patterns of the DGMC physicians. In fact, most of the PCMs interviewed were not aware of specific PCM requirements such as the procedures that they were expected to accomplish. There is a survey under development by the statisticians assigned to the Clinical Investigation Facility (CIF), targeted to the physician staff. This survey will solicit information about their skill sets, their understanding of the PCM concept, and their estimated clinical strengths and weaknesses. This tool will then be used to develop physician education programs to improve provider skill sets. With the implementation of the Corporate Executive Information System (CEIS), provider profiling will be easier to accomplish. This profiling in conjunction with UM reviews targeted to high cost and high volume procedures will enable management to target training to the areas most in need.

DGMC should develop practice and referral guidelines for the PCMs, to assist with provider training, and to ensure information is available to the PCM when making a decision to consult or not. This system was implemented at Madigan Army

Hospital, and as a result, the number of inappropriate referrals decreased (J. Rickard, personal communication, 12 Nov 97). These guidelines are available to all providers via the Internet and are built upon UM review criteria, augmented with specific treatment protocols, and agreed upon by the specialists and PCMs.

Feedback to Referring Provider

The first step in developing a method to ensure provider feedback is to establish a policy mandating the use of CHCS to initiate electronic consults. The consult module of CHCS automatically generates messages to the referring provider whenever there is an action on a consult. This system will automatically inform the referring provider when the patient has been placed on the "wait list" which indicates the consult has been accepted but not appointed and when the patient receives an appointment.

Efforts are currently underway to establish CHCS connectivity from DGMC to the remaining MTFs within the region. This issue should be pushed from the executive management level within DGMC to the Lead Agent for Region 10. Once all MTFs are connected directly, the only consults requiring processing through the CMO will be those from the network providers. There has been discussion on allowing the

TRICARE contractor access to CHCS, but executive management has not accepted this concept. Optimally, this would be the next step in creating a truly integrated system with the DoD and contractor using the same system. Until this is accomplished, however, CMO must establish a tracking and suspense system that allows for ensuring follow-up gets sent out on the status of consults.

To ensure physician reports are conveyed back to the referring provider, the recommendation is to bolster the existing radiology transcription service to handle the consult business. This system allows providers to call in from anywhere and dictate their notes. These are then transcribed into CHCS and are electronically attached to the original consult. Providers must then review the transcribed notes and electronically sign them. Once this is done the information is automatically forwarded to the referring provider. Again, for those not directly connected, CMO must establish a system to ensure hard copies are extracted and sent to the referring physicians.

UM Review

The easy recommendation is to initiate UM on consults. The hard part is determining the most appropriate method and finding appropriate resources to manage the program. Lengthy

discussions were held on the issue of prospective vs. concurrent UM. My research yielded mixed results on the effectiveness of prospective reviews in changing provider behavior (Inglehart, 1992; Chao, Galazka, Stange, & Fedirko, 1993). The fundamental question discussed within the working group dealt with the desired outcome of UM. Will UM be used to limit access or will it be used to gather data on provider practice in order to provide additional education? The reality of the military system is such that if a patient is told he/she cannot get a referral appointment to a specialist, they are inclined not to use any formal appeals process, but to call the hospital commander or write their congressperson. One specialist I interviewed felt it is much easier and takes far less time and resources to see a patient, even if the appointment is inappropriate, than it is to answer a formal congressional inquiry. They went on to say, as a second level reviewer, they would be inclined to validate the need for a referral appointment. This was the basic sentiment among several other specialists. One way of addressing this issue is to improve beneficiary education about managed care. In order for this to occur, the PCMs require an understanding of the managed care principles in TRICARE, as addressed

previously, in order to articulate the realities of the system to the patients.

Currently published DoD-HA policy guidelines on outpatient utilization management only require prospective review for cataracts, magnetic resonance imaging procedure, adjunctive dental care, and mental health subsequent to the eighth visit (Joseph, 1994). Although there is some indication that more prospective review will be required, there is no certainty this will come to fruition. Of the seven DoD medical centers I contacted (Wilford Hall Air Force, Brooke Army, Tripler Army, Madigan Army, Walter Reed Army, San Diego Navy, and Bethesda Navy), none had an internal UM process to review consults prospectively. Two medical centers (Wilford Hall and Brook Army) require the TRICARE contractor review 100 percent of the consults. Several other medical centers (Tripler, Madigan, and Walter Reed) conduct concurrent or retrospective reviews. Upon further discussions with these DoD medical centers, I found that none limit or deny care based upon UM review. When questioned about this practice, the theme surfacing most often was that their efforts were devoted to identifying problem areas to target physician behavior. Most stated that through ongoing PCM education,

targeted to the high referral diagnoses, they were able to reduce inappropriate consults significantly.

Based on these findings my recommendation to DGMC is to pursue a concurrent review policy, targeting first those clinics with the most disengagements. Information should be gathered through the UM review process. For services not actively being reviewed, the specialists need to identify inappropriate referrals and forward this information to the UM department. This information can assist the specialists and the PCMs in constructing the practice guidelines identified earlier. Also, rather than changing the consult process dramatically at first, concurrent review can be used to gather data to determine the extent of the inappropriate referral problem. Without knowing if 2 percent or 20 percent of referrals are inappropriate, it becomes very difficult to target for improvement.

The logistics of the consult process make it difficult for prospective review. Currently DGMC generates approximately 150 consults per day. There is only one individual assigned to conduct UM for consults. The limitation in the CHCS system is that only whole clinics can be sampled, not specific diagnoses or DRGs; therefore, all consults to a specified clinic are diverted to UM. All of these consults

are held in the computer queue until the reviewer sorts through them for the specific DRGs being monitored. These are then reviewed against UM criteria. The remaining consults, i.e., those diagnoses not being reviewed, must be forwarded to the specialty clinic. Given these limitations, the scope of review will need to be strictly limited in order to manage the program. My recommendation is for the TRICARE flight to develop a listing of the most referred procedures, highest cost procedures, and clinics with the most disengagements. This information should be used by UM to schedule monitoring. Once a procedure for review is identified, copies of all referrals to the clinic performing that procedure can be routed to the UM department for review.

The recommendation of the working group, however, is for prospective UM reviews. The thoughts of the group were to err on the side of the patient if a consult fails UM review, allowing the patient to see the specialist if capacity was available. As such, it appears to this researcher that the working group's recommendation for prospective review will achieve the same results as concurrent reviews.

Consult Management

The final recommendations address restructuring of the consult management office. The scope of responsibility for

the consult office should be expanded to actually manage consults, especially those from outside the facility and not electronically connected. A suspense and tracking system is needed to ensure external PCMs are receiving status updates and consultation reports.

The consult office should also take over calling patients to schedule their appointments. Patients needing an appointment will be identified by having their names appear on the waiting list in CHCS. Outgoing calls to patients should be accomplished at varied times such as evenings or weekends, rather than attempted during working hours. This change will free up the central appointment clerks from spending time making calls to patients.

In the proposed process, patients are advised by their PCM to call for their appointment after 0900 the following day. This will allow any specialists who demand to review their consults time at the end of the day or first thing the following morning. If they do not review their consults by 0900 and the patient calls, the appointment will be booked. This is the process used my Madigan Army Medical Center for managing physician reviews. Once consults are accepted by the clinic, the patient's name is added to the waiting list. If the clinic desires, they can attempt to contact the patient to

schedule an appointment. If the patient has not been scheduled for an appointment within 72 hours, the consult management office will begin attempting to contact the patient, making calls not only during the day but in the evening as well.

Conclusion

This project reviewed the consult management process for DGMC. Several major changes are recommended to include institution of concurrent UM to profile providers, changes in the structure and responsibilities of the consult management office, upgrading the dictation and transcription services and mandating electronic consults.

It is clear based on interviews with PCMs, Lead Agent staff members, and physicians from other facilities the consult process has deficiencies. The recommendations in this project could assist the DGMC staff to quantify deficiencies and target improvement efforts in an organized fashion. Two potential measurements of these recommendations are a reduction in internal inappropriate consults and an increase in PCM satisfaction with DGMC as a specialty referral center. Reducing inappropriate consults will open up space for more referrals from the network and other MTFs. To entice these facilities to make DGMC their first choice for healthcare,

improvements in the feedback loop and keeping them informed of the status of their patients will increase their level of satisfaction. Initiation if UM data collection is needed to establish a baseline for future benchmarks. Patients who perceive DGMC as taking an interest in them by facilitating their appointments are likely to stay members of the DoD healthcare system.

As policymakers plan for the future, decisions about the appropriate size of the military health care system will be of paramount importance. Improving access and thereby increasing customer satisfaction leading to continuing re-enrollment within the direct care system should send a significant message addressing the viability of the direct care system. This study has region-wide utility. Based on results from this project, the fundamental operations of DGMC should be altered, improving service to every PCM and patient within the region.

Indeed, DoD's ability to use MTF resources to the greatest extent possible is the only hope of maintaining a military medical system, as we now know it.

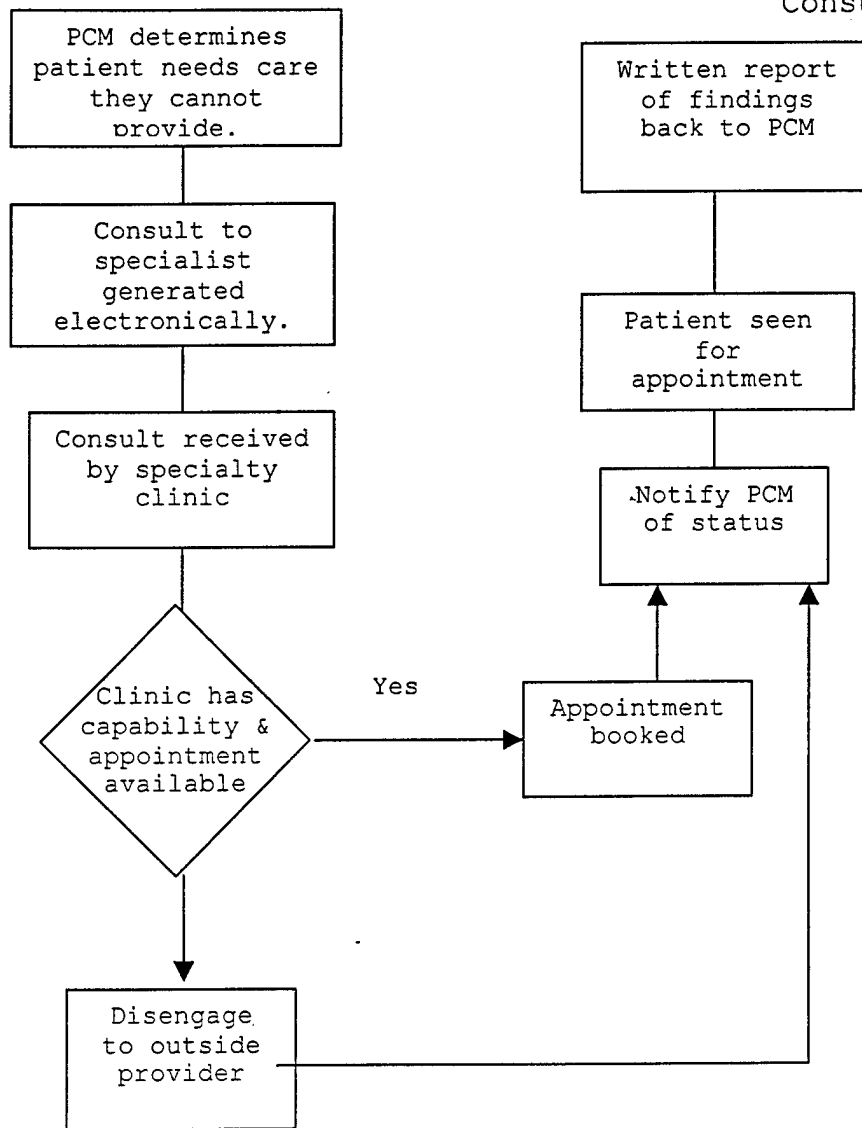


Figure 1. Flow of ideal consult process.

References

Armstrong, D., Fry, J., & Armstrong, P. (1991). Doctor's perceptions of pressure from patients for referral. British Medical Journal, 302 1186-1188.

Backhus, S. (1997). Defense health care - TRICARE resource sharing program failing to achieve expected savings. (GAO Publication No. HEHS-97-130). Washington, DC: U.S. Government Accounting Office.

Backhus, S., & Shields, C. (1995). Defense health care - Issues and challenges confronting military medicine. (GAO Publication No. 95-104). Washington, DC: U.S. Government Accounting Office.

Barrett, P. (1997). The political threat to TRICARE. [On-Line]. Available: www.acs.amedd.army.mil/das/J9632.htm

Bowers, M., Swain, J., & Koehler, W. (1994). What attributes determine quality and satisfaction with health care delivery? Health care management review, 19(4), 49-55.

Brockless L. (1994). Consultation by letter in early eighteenth-century Paris: The Medical practice of Etienne-Francois Geoffroy. Clio Medica, 25, 79-117.

Chao, J., Galazka, S., Stange, K., & Fedirko, T. (1993). A prospective review system of nonurgent consultation requests

in a family medicine residency practice. Family Medicine, 25 (9), 570-575.

Chisick, M. (1997). Satisfaction of active duty soldiers with family dental care. Military Medicine, 162(2), 105-108.

Command poll hits housing. (1995, August 7). The Army Times, p. 24.

Fertig, A., Roland, M., King, H., & Moore, T. (1993). Understanding variation in rates of referral among general practitioners: are inappropriate referrals important and would guidelines help to reduce rates? British Medical Journal, 307(6917), 1467-1470.

Goldfarb, M. Hornbrook, M., & Higgins, C. (1983). Determinants of hospital use: a cross-diagnostic study. Medical Care, 21(1), 42-66.

Grol, R., Whitfield, M., De Maeseneer, J. & Mekkink, H. (1990). Attitudes to risk taking in medical decision making among British Dutch and Belgian general practitioners. British Journal of General Practice, 40, 134-136.

Hill, J. (1994). Hospital costs - cost control efforts at 17 Texas hospitals. (GAO Publication No. AIMD-95-21). Washington, DC: U.S. Government Accounting Office.

Inglehart, J. (1992). Health Policy Report: The American health care system. The New England Journal of Medicine, 327(10), 742-747.

It's People. (1994, September 5). The Army Times, p. 3.

Jaggar, S. (1996). Practice guidelines - Managed care plans customize guidelines to meet local interests. (GAO Publication No. HEHS-96-95). Washington, DC: U.S. Government Accounting Office.

Jatulis, D., Bundek, N., Legorreta, A. (1997). Identifying predictors of satisfaction with access to medical care and quality of care. American Journal of Medical Quality, 12(1), 11-18.

Joseph, S. (1994). Utilization management activities in the direct care system under TRICARE. (HA Policy No. 94-005). [On-Line] Available: www.ha.osd.mil/.hso/umpl9405.html

Joseph, S. (1996). Policy guidelines for implementing managed care reforms in the military health services system. (HA Policy No. 96-025). [On-Line]. Available: www.ha.osd.mil/tricare/trimhssl.html

Kongstvedt, P. (Eds.). (1996). Compensation of primary care physicians in open panel plans. The Managed Health Care Handbook. (p. 121). Gaithersburg, MD: Aspen.

McMahon, L. & Newbold, R. (1986). Variation in resource use within diagnostic related groups: the effect of severity of illness and physician practice. Medical Care, 24(5), 388-397.

Nelson, E. (1992). Do patient perceptions of quality relate to hospital financial performance? Journal of Health care marketing, 12(4), 6-13.

O'Brien, K., McComb, J., Fox, N., Bearn, D., & Wright, J. (1996). Do dentists refer orthodontic patients inappropriately. British Dental Journal. 181(4), 132-136.

Payne, S. (1987). Identifying and managing inappropriate hospital utilization: A policy synthesis. Health Services Research, 22(5). 709-769.

Policy guidelines for transfer payments. (1997). [On-Line]. Available: www.ha.osd.mil/hbp/tppatch1.htm Author.

Rakel R. (Eds). (1995). The Family Physician. Textbook of family practice (5th ed.). Philadelphia: WB Saunders Co.

Reynolds, G., Chitnis, J., & Roland, M. (1991). General practitioner outpatient referrals: do good doctors refer more patients to hospital? British Medical Journal, 302(6787), 1250-1252.

Roland, M., & Morris, R. (1988). Are referrals by practitioners influenced by the availability of consults? British Medical Journal, 297(6648), 599-600.

Saunders, T. (1978) Consultation - referral among physicians: practice and process. Journal of Family Practice, 6(1), 123-128.

Scanlon, W. (1995). Arizona Medicaid - Competition among managed care plans lowers program costs. (GAO Publication No. HEHS-96-2). Washington, DC: U.S. Government Accounting Office.

Schatz, M., Venable, R., & Weiss, K. (1996). Referring for knowledge base: what is the case for referral? Journal of Allergy & Clinical Immunology, 97(3), 876-878.

Shortell, S., & Hull, K. (1996). The new organization of the health care delivery system. In S. Altman & U. Reinhardt (Eds.), Strategic choices for a changing health care system. (p. 110). Chicago, IL: Health Administration Press.

Taylor, R., & Lessin, L. (1996). Restructuring the health care delivery system in the United States. Journal of Health Care Finance, 22(4), 33-60.

Young, W., Minnick, A., & Marcantonio, R. (1996). How wide is the gap in defining quality care? Journal of Nursing Administration, 26(5), 15-20.